

Application No. 10/003,912  
Amendment dated June 22, 2004  
Reply to Office Action of January 22, 2004

**Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

Claim 1 (currently amended) A heat transfer fluid mixture consisting essentially of ~~a heavy gas selected from the group consisting of nitrogen, argon, carbon dioxide, and mixtures thereof, and a light gas selected from the group consisting of hydrogen, helium, and any mixture thereof.~~

Claim 2 (currently amended) The heat transfer fluid mixture of claim 1 wherein the light gas hydrogen has a concentration ranging from about 20 mole percent to about 99 mole percent.

Claim 3 (currently amended) The heat transfer fluid mixture of claim 1 wherein the light gas hydrogen has a concentration ranging from about 30 mole percent to about 98 mole percent.

Claim 4 (currently amended) The heat transfer fluid mixture of claim 1 wherein the light gas hydrogen has a concentration ranging from about 40 mole percent to about 97 mole percent.

Claim 5 (currently amended) The heat transfer fluid mixture of claim 1 wherein the light gas hydrogen has a concentration ranging from about 50 mole percent to about 96 mole percent.

Claim 6 (currently amended) The heat transfer fluid mixture of claim 1 wherein the light gas hydrogen has a concentration ranging from about 60 mole percent to about 95 mole percent.

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Claim 7 (original) The heat transfer fluid mixture of claim 1 wherein the heavy gas argon has a concentration ranging from about 1 mole percent to about 99 mole percent.

Claims 8-57 (withdrawn)

Claim 58 (new) A heat transfer fluid mixture consisting essentially of helium and a heavy gas selected from the group consisting of nitrogen, carbon dioxide, and mixtures thereof.

Claim 59 (new) The heat transfer fluid mixture of claim 58 wherein the helium has a concentration ranging from about 20 mole percent to about 99 mole percent.

Claim 60 (new) The heat transfer fluid mixture of claim 58 wherein the helium has a concentration ranging from about 30 mole percent to about 98 mole percent.

Claim 61 (new) The heat transfer fluid mixture of claim 58 wherein the helium has a concentration ranging from about 40 mole percent to about 97 mole percent.

Claim 62 (new) The heat transfer fluid mixture of claim 58 wherein the helium has a concentration ranging from about 50 mole percent to about 96 mole percent.

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Claim 63 (new) The heat transfer fluid mixture of claim 58 wherein the helium has a concentration ranging from about 60 mole percent to about 95 mole percent.

Claim 64 (new) The heat transfer fluid mixture of claim 58 wherein the heavy gas has a concentration ranging from about 1 mole percent to about 99 mole percent.

Claim 65 (new) A heat transfer fluid mixture consisting essentially of hydrogen and carbon dioxide, wherein the hydrogen has a concentration ranging from about 60 mole percent to about 95 mole percent.